Iowa Department of Education Guidelines for PK-12 Competency-Based Education

This document provides guidance for developing competency-based education (CBE) in Iowa districts and schools.

Competency-based education results in deeper learning outcomes for students as they engage in application, analysis, and evaluation of academic content to prepare for post-secondary success. Students reach proficiency of academic content while learning how to think critically and creatively, collaborate and communicate effectively, adapt to challenges and complex problems, and be accountable for quality results. A CBE system validates learning and proficiency of standards and competencies that occur both in and outside the traditional school structure and that go beyond the constraints of seat time and siloed content areas. CBE enables districts and schools to provide student-centered, personalized learning systems through which students of all ages develop ownership of their learning and connect content to their interests and goals.

I. Principles of a Competency-Based Education System: the philosophy behind the system

1. Students advance upon demonstrated proficiency.

- Students advance to higher level work upon demonstration of proficiency on competencies rather than according to age or seat time.
- Students are evaluated on performance and application.
- Students demonstrate proficiency on competencies and earn credit or advance in content at their own pace, working through some competencies more rapidly while taking more time to ensure proficiency on others.
- Students are considered proficient on graduation requirements or advanced through content at any level when they have demonstrated the knowledge, skills, and Universal Constructs (creativity, complex communication, collaboration, critical thinking, flexibility and adaptability, and productivity and accountability) required to be successful at the next level of advanced learning in the content or in other curricular areas.

2. Competencies are based on enduring understandings and require the transfer of knowledge, skills, and the Universal Constructs to complex situations in and/or across content areas and/or beyond the classroom.

- Competencies are aligned to the Universal Constructs and the appropriate statewide learning standards (the Early Learning Standards, the Iowa Core, and standards in content areas not yet a part of the Iowa Core).
- Competencies include explicit, measurable, and transferable learning outcomes that empower students.
- The unit of learning is defined by standards and competencies rather than courses and grade levels.
- Learning and demonstrations of proficiency on competencies are designed around student needs, life experiences, and the skills needed to be ready for college, career, and citizenry.
- Competencies are most often aligned to multiple standards, both within and across disciplines.

3. Assessment is a meaningful and a positive learning experience for students.

- Schools embrace a strong emphasis on formative assessment as learning becomes focused on standards and competencies.
- Teachers collaborate to develop scoring documents that describe proficiency and focus on student learning.
- Teachers assess standards, competencies and Universal Constructs in multiple contexts and multiple ways and rarely in isolation.
- Summative assessments of competencies are adaptive and timely.
- Scoring documents, including Gateway Indicators, learning progressions, and “I Can” statements, clearly define how teachers assess demonstrations of proficiency.
- Students, teachers, and parents/guardians have access to information about student learning progress throughout the learning continuum.
- Teachers and students monitor learning progress using multiple measures which include scoring documents related to student performances and student generated work samples as evidence of success.

4. Students receive rapid, personalized support based on their individual learning needs

- The relationship between students and teachers changes as students gain understanding of competencies and take ownership of their learning and as teachers become facilitators of learning while providing the appropriate supports.

- Students co-design their learning experiences based on individual strengths, needs, and interests. The flexibility and supports are utilized to ensure students reach proficiency of deeper learning goals.
- Technology-enabled solutions that incorporate predictive analytic tools enable teachers to monitor and be responsive to student learning needs.
- Pacing matters; therefore, educators must provide high-quality interventions to ensure students progress toward timely graduation.

5. All learning is validated regardless of when, where, or how students acquired and/or demonstrated the learning.

- Districts accept evidence of learning toward graduation requirements in experiences inside school and outside-of-school settings.
- Districts provide connections between students and community members to develop internships and other outside-of-school learning opportunities.
- Teachers ensure student learning through outside-of-school environments such as 4-H, family-owned businesses, part-time jobs, church, clubs, and organizations can be acknowledged and used toward demonstration of proficiency on standards and/or competencies.

*Adapted from International Association for K-12 Online Learning (*i*NACOL)

II. Characteristics of a Competency-Based Education System: what it looks like in operation

1. The district has strong internal and external stakeholder commitment to and involvement in district-wide competency-based education.

Key indicators include:

a. A shared vision for competency-based education (CBE) for all students has been developed with broad-based stakeholder participation.
b. Long- and short-range strategic plans for CBE are developed with broad-based stakeholder participation.
c. The school board has adopted:
    i. a clear definition of competency-based education,
    ii. a definition of proficiency consistent with the State Guidelines for PK-12 Competency-Based Education and postsecondary education requirements, and
    iii. expectations for how proficiency will be demonstrated and assessed.
d. The district has materials and vehicles for communicating about competency-based education to students, parents/guardians, teachers, and community members.
e. Community members grant permission and provide support for the transition to a competency-based system, exhibited by their ability to:
    i. articulate the reason for change,
    ii. articulate what the school is doing to facilitate this transformation, and
    iii. articulate their role in a competency-based system.
f. Community members share responsibility for student learning.
g. Businesses, organizations, industry, etc. partner with the school to create learning environments and opportunities for students such as, but not limited to, internships, clubs, and after school programs.
h. Internal and external stakeholders are appropriately involved in decision making.
i. Internal and external stakeholders are regularly provided vehicles for input and feedback such as, but not limited to, surveys, questionnaires, and meetings.
j. The union contract allows for flexible scheduling and staffing.

2. The district nurtures a culture of continuous improvement.

Key indicators include:

a. Continuous collaborative inquiry for developing staff competencies related to content, instruction, and assessment in a competency-based system.
b. Ongoing study of content, practice, and student effects in relation to student progress toward proficiency.
c. Constant use of data to guide decisions.
d. Structures for shared decision making related to learning goals, how it will be learned and assessed, and determination of proficiency (includes individual students, small and large groups of students, and adults).
e. Clearly shared goals and progress indicators related to student learning of the standards, competencies, and universal constructs.
f. Easy access to data and information to guide the work.
g. Community support for collaborative inquiry approaches for staff and student learning in a competency-

based system.
h. Strong leadership provided at all levels of the system to guide and protect the transition to a competency-based system.

3. The district adopts policies and procedures to support a competency-based system.

Key indicators include:

a. Key policy issues have been addressed and policies allow for:
   I. units/credits that are not exclusively time-based,
   II. opportunities to earn credit for learning that occurs outside the school walls but demonstrates proficiency on rigorous standards and competencies, and
   III. progression based on demonstration of proficiency.
b. Procedures that clarify responsibilities such as:
   i. student safety during extended learning opportunities (background checks, supervision),
   ii. student transportation to and from extended learning opportunities, and
   iii. guidelines and criteria for participation in online and extended learning opportunities.
c. Policies define academic performance categories that allow for clear decisions around extracurricular eligibility.
d. Policies and procedures are consistently reviewed in light of changes in the system.
e. Key leaders advocate for state policies that promote CBE.

4. Competencies and scoring documents align with the Universal Constructs and the appropriate standards (Early Learning Standards, the Iowa Core standards, and other content standards not yet a part of the Iowa Core).

Key indicators include:

a. The district has developed or adopted competencies that guide student learning toward proficiency of the standards and Universal Constructs.
b. Competencies emphasize transfer of knowledge and skills in the standards and the Universal Constructs.
c. Competencies and scoring documents are reviewed on a regular basis and updated as necessary to ensure tight alignment to the standards and Universal Constructs.

5. Assessments are a meaningful and positive learning experience for students.

Key indicators include:

a. Assessments, including performance tasks and performance assessments, are tightly aligned to the standards and Universal Constructs.
b. The scoring documents clearly articulate what is expected for a demonstration of proficiency.
c. Students are evaluated on performance and application.
d. Teachers and students use formative assessments to redirect teaching and learning throughout the learning process.
e. Competencies, standards, and Universal Constructs are assessed in multiple contexts and multiple ways.
f. Examples of student work demonstrate knowledge and skill development and learning progressions to help students understand their own progress.
g. Adequate supports, based on assessment data, are available for students who do not become proficient in a timely manner.
h. Assessment practices are reviewed on a regular basis and updated as necessary.

6. Learning environment is student-centered and personalized.

Key indicators include:

a. A safe and collaborative learning environment for students and adults is established and maintained.
b. Students, parents/guardians, teachers, and administrators provide feedback on the learning environment of the school on a regular basis.
c. Students:
   i. have voice and choice in when, how, and where they learn and how they demonstrate proficiency,
   ii. gradually take more responsibility for the design of their learning pathways toward proficiency on competencies, and
   iii. have clarity about what they need to accomplish and ownership of the learning pathways.
d. Teachers:

i. are supported in their own learning as they become more proficient in providing personalized learning experiences for students, which are connected to each student's interests, needs, and life experiences,
ii. are developed to be strong facilitators and coaches, skilled in deploying a broad range of instructional practices that engage all learners (e.g. blended learning, project-based learning, collaborative learning),
iii. collaborate with other adults, both in and outside school, to provide opportunities for their own growth as well as for their students' learning,
iv. provide high quality resources/interventions for students to become college and career ready, and
v. partner with students to design learning keep each student on track for successful learning and for graduation.

e. Students and parents/guardians have deep understanding of the competencies, standards, and Universal Constructs and are partners in determining how students will demonstrate proficiency.
f. The district and community partner to provide all students with a variety of quality learning opportunities both in and out of the school building (e.g. project-based learning, internships, after school programs, clubs, and organizations).

7. Leadership is purposefully shared throughout the system.

Key indicators include:

a. Leadership is formalized at all levels of the system. Students, teachers, and administrators, as well as, parents/guardians and community members provide leadership for ensuring students learn well.
b. Leaders at all levels are supported in their own learning as they become more proficient at development of personalized learning for everyone in the system.
c. The district provides support and development of leadership at all levels of the system to guide and protect the transition to a competency-based system.

8. Credit/advancement is based upon demonstration of proficiency.

Key indicators include:

a. Credit is based on demonstration of proficiency on competencies rather than on time.
b. Students demonstrate proficiency on competencies and earn credit or advance in content at a negotiated pace. They work through some competencies more rapidly while taking more time to ensure proficiency on others.
c. Determinations of proficiency are based on agreed upon scoring documents, assessment tools, and/or assessment tasks aligned to the Universal Constructs, standards, and/or competencies.
d. Grading practices emphasize student-generated evidence of proficiency.

9. The district provides technical and structural supports for teachers, students, and parents/guardians.

Key indicators include:

a. Data systems enable teachers and others to document, monitor, and report student learning in relation to standards and Universal Constructs.
b. Technology systems enable teachers, students, and their parents/guardians to access individual student portfolio reports that show student progress at achieving proficiency of identified learning targets.
c. Teachers, students, and parents/guardians have adequate support to understand and use the system(s) for documenting student progress toward proficiency.
d. Competencies and scoring documents are available to students and parents/guardians throughout the learning process, and the district ensures that parents/guardians have adequate support in understanding the expectations of the competencies as well as the purpose of the scoring documents.
e. Staff are supported as they facilitate learning in a competency-based environment. The support focuses on capacity building related to:
    i. deep understanding of the standards and the Universal Constructs,
    ii. selection of appropriate competencies and scoring documents from the models provided by the state or to develop competencies, scoring documents, and performance tasks/assessments that demonstrate student learning of the standards and Universal Constructs, and
    iii. knowledge and skills to consistently assess student learning performances and monitor progress until students demonstrate proficiency of standards and competencies.

f. Routines and strategies are established for teachers and other staff to regularly review performance data and make adjustments to instruction as needed.
g. Teacher and student schedules allow for anytime/anywhere learning, progression based on proficiency, and other aspects of a CBE system.
h. Teacher teams are organized to support competency-based education through common planning time, collaborative inquiry, and co-teaching models.
i. The school calendar enables extended learning opportunities.
j. Job descriptions and staff assignments support anytime/anywhere learning, progression based on proficiency, and other aspects of competency-based education.
k. Space is allocated to maximize student access to technology and to places for individualized as well as group or project-based work.
l. Budget allocations support flexibility in staffing, scheduling, use of space, etc.

10. The district provides smooth transitions within and beyond the PreK-12 experience.

Key indicators include:

a. Reports and transcripts contain reliable evidence of student learning and information necessary for post-secondary institutions to admit and place students.
b. Open communication exists between levels within the district and between the district and post-secondary providers that typically serve the district's graduates.

III. Definitions and Explanations

Advancement: Progress to more advanced work within the content area.

Assessment: A variety of methods used to determine where students are in their learning before, during, and after instruction. All assessments, including examinations, performance tasks, and other evidence of learning must be instructionally sensitive and align with the standards. Assessments, not machine scored, should be scored by educators appropriately licensed and endorsed in the grade level and content area.

Formative Assessment (Assessment FOR Learning): (Assessment FOR Learning)**:** Formative assessment is a process teachers and students use during instruction to determine feedback to adjust further teaching and learning toward improved student achievement of the instructional outcomes. CBE schools embrace a strong emphasis on formative assessment practices as the unit of learning becomes modular. Formative assessment:

- provides students with a clear understanding of the intended learning (e.g. learning goals, success criteria) aligned to the standards and linked within a learning progression;
- includes eliciting on-going evidence of student learning using instructionally sensitive assessment methods (e.g. rubrics/scoring guides for performance tasks, exit tickets for conceptual understanding, quick writes for pre-assessment);
- uses evidence of student learning to make instructional decisions and to help students learn to make learning strategy decisions;
- provides students with non-judgmental, immediate, and actionable feedback based on the learning goals and the evidence collected of current learning;
- provides students with opportunities for self-assessment/reflection on their learning, and
- provides students with opportunities to provide non-judgmental and actionable peer feedback in a collaborative setting.

Performance Assessment (Assessment AS Learning): A task that provides opportunity for a student to engage in the process of gaining knowledge and skills and becoming more proficient at the Universal Constructs, which results in the demonstration of that learning. The assessment task design assures that the student has engaged in critical thinking to develop a product of learning. In a competency-based system, the teacher and the student work together to determine what process, product, and/or presentation will both guide learning and become the natural outcome to demonstrate the learning. Performance assessments allow students to use their knowledge and skills as well as the Universal Constructs and personal work habits to engage in

learning connected to their interests and passions and even to extend their influence beyond the classroom.

Blended Learning: Any formal education program 1) in which a student learns at least in part through online learning, with some element of student control over time, place, path, and/or pace ***and*** 2) the student learns at least in part in a supervised brick-and-mortar location away from home ***and*** 3) the modalities along each student's learning path within a course or subject are connected to provide an integrated learning experience.

Competency: Expected learning based on one or more enduring conceptual understandings that requires the transfer of knowledge, skills, and dispositions to complex situations in and/or across content areas and/or beyond the classroom.

Multiple standards both within & across disciplines outline the knowledge, conceptual understanding, abilities, and skills required to meet the complex demands of the competency. Although individual standards may be assessed/demonstrated at any level of Blooms Taxonomy or Webb's Depth of Knowledge, the expectation of deeper learning related to the competency requires assessment/demonstration at the upper levels of Bloom's (analyze, evaluate, create/synthesize) or Webb's (Level 3: Strategic Thinking, Level 4: Extended Thinking) as well as the appropriate use of the Universal Constructs, dispositions, and employability skills.

Competencies guide students and teachers toward a shared development of pathways to demonstration of learning.

Competency-Based Education: A system of education in which learners advance through content or earn credit based on demonstration of proficiency on competencies. Some students may advance through more content or earn more credit than in a traditional school year while others might take more than a traditional school year to advance through the same content or to earn credit. Credit may also be earned for out-of-school experiences and/or accomplishments. Students at all grade levels are afforded opportunities for more explicit or intensive instruction or enrichment within the content.

Credit: A unit awarded toward high school graduation. Credit awarded toward high school graduation should be the same for students demonstrating proficiency on standards through competency-based pathways as for those working through the same standards in a traditional time-based pathway or other nontraditional pathways such as online learning. PK-8th grade students advance through content independent of units of credit**.**

Flexibility: Students may work as individuals or in groups and are provided appropriately challenging work according to their identified needs and not always a common learning objective. Elementary students may be distributed among teachers at or across grade levels and support personnel for targeted or intensified support as they struggle or advance. Students may be grouped with multi-age peers. The amount of time each student works on a specific standard and/or remains in an assigned group is determined by performance on ongoing assessments.

Personalized Learning: Learning is tailored to each student's strengths, needs and interests in order to provide flexibility and supports to ensure all students reach proficiency of the highest standards/competencies possible. Personalized learning enables student voice and choice in what, how, when, and where they learn.

Proficiency: Demonstrated skill or knowledge required to advance to and be successful in higher levels of learning in that content area or using that content. Districts and schools participating in competency-based education will determine proficiency levels and appropriate assessments to ensure all students being awarded credit toward high school graduation or advanced through content at any level have demonstrated

the skills and knowledge required to be successful at the next level of advanced learning in the content or related areas as appropriate.

Teacher Pace: The pace the teacher knows will keep the student on track for timely graduation. Students being able to work at their own pace must be balanced with the goal to graduate on time. Educators in the system are responsible to work together toward on time graduation for all students.

III. License and Endorsement

Determination of Proficiency: Proficiency on competencies for advancement or credit must be determined by an educator properly licensed and endorsed in the content area and level of the advancement or credit awarded.

IV. Examples: The following scenarios are provided as examples and are not intended to be all inclusive of the varied examples that may be encountered with moving to competency-based education models.

Recognizing Learning Outside of School: A high school student, who has designed several websites including one for the scout troop and one for a family member's small business, might request credit for Web Design 1 and placement in Web Design 2. An educator who holds a license valid at the high school level determines appropriate assessment(s) and whether credit, and in this case advancement, is awarded—or if further work is necessary to complete other competencies, which were not demonstrated in the websites presented, but are associated with the credit. The teacher and student can negotiate the demonstration of those competencies so credit/advancement can be awarded. (Principles 1, 3, 5; Characteristics 3, 5, 8)

Credit Awarded for Advanced Learning: An eighth grade student demonstrates advanced understanding of algebraic concepts. When the appropriately endorsed teacher determines through assessment, observation, etc. that the student understands and can apply the competencies associated with the Algebra 1 credit, the teacher awards the Algebra 1 credit and moves the student to another advance math class. If there is no appropriately licensed teacher at the middle school, the student should be guided to the appropriate high school teacher. (The district must also have a policy allowing middle school students to earn high school credit as per 2011 Iowa Acts, Senate File 453, which amended Iowa Code 256.7(26)(a).) (Principle 1; Characteristic 8)

Rapid, Personalized Support for Students Not on Teacher Pace: An Algebra 1 student struggles and needs extra time with many of the algebraic concepts. The appropriately endorsed algebra teacher works with the student at the student's pace and at the end of the year awards credit according to the competencies in which the student has demonstrated proficiency. The student has the opportunity to work over the summer to demonstrate competency or can start in the next school year where he/she left off in the spring. The student may also work to master the concepts over the summer through formal or informal education and be awarded credit and move forward as appropriate when school starts. (It is also possible that this student might have been more appropriately placed in a pre-algebra class rather than in Algebra 1.) (Principles1, 4; Characteristics 6,9)

D. **Advance upon Demonstrated Proficiency:** A fifth grade student has an avid interest in science and can demonstrate the essential concepts and skills of scientific inquiry. The student has maintained a personal record of a wide variety of scientific investigations conducted at home, including the appropriate tools and techniques necessary to gather, process, and analyze scientific data. The student communicates his scientific understanding using appropriate vocabulary and makes scientifically valid conclusions from the data collected. The teacher might choose to 1) offer an opportunity for the student to conduct scientific experiments under the supervision of a certified middle or high school science instructor, 2) challenge the student with virtual learning opportunities using online science resources, 3) collaborate with science professionals in the community to conduct real-world science experiments that address the Iowa Core science standards at a deeper and more quantitative level than would be possible in an elementary classroom, or 4) work toward proficiency on

other competencies outside this content area.(Options listed or examples and not exhaustive.) (Principle 1, 5; Characteristic 6)

VI. District Policy: Each district or school should develop policy that outlines district or school competency-based pathways.

Policy should include, but is not limited to:

- Student access.
- Connecting middle school students to high school teachers if other district policy provides for middle school students to earn high school credit.

VII. Resources: Although there are many resources for information about competency-based education, the following sources are offered as a starting point for districts interested in working toward competency-based pathways for their students.

A. *Blended: Using Disrupting Innovation to Improve Schools* (2015). M. Horn, H. Staker. Jossey-Bass: San Francisco

B. *Delivering on the Promise: The Education Revolution* (2009). R.A. DeLorenzo, W.J. Battino, R.M. Schreiber, and B.G. Carrio. Solution Tree: Bloomington, Indiana.

C. International Association for K-12 Online Learning (*i*NACOL) http://www.inacol.org/resources/resource-search/?resource_topics=14 www.CompetencyWorks.org

D. www.IACompEd.com

E. Marzano study of the RISC competency-based education program FIX LINK http://www.marzanoresearch.com/documents/RISC_vs_Non_RISC.pdf

F. Re-Inventing Schools Coalition (RISC) http://www.reinventingschools.org/resources/results/

1. Among the results realized through the RISC program are the following:

- Significant, sustained increases in student achievement.
- Increases in the number of students applying to, attending, and remaining in college.
- Decreases in staff turnover.
- Significantly higher percentages of students passing high-stakes state assessments.

2. Re-Inventing Schools Coalition videos http://www.reinventingschools.org/resources/video/

G. Research Base for Proficiency-based Instructional Practices: Drawing from empirically-based studies of teaching practice as well as practitioner-oriented prescriptions and frameworks for instructional practice, this research base provides a foundation for the attributes of competency-based teaching and learning. http://www.k-12leadership.org/proficiency-project/research-base

H. National website: www.CompetencyWorks.org

VIII. State Contact: Sandra Dop 515-281-0127 Sandra.Dop@iowa.gov